

WHAT IS CLAIMED IS:

1           1. A method of transferring data comprising:  
2           receiving a transfer request;  
3           determining if the transfer request is a write to a memory location;  
4           if the transfer request is a write to a memory location, then sending the transfer  
5 request as a posted request; else

6           determining a number of available transfer request entries in a posted-write first-  
7 in-first-out memory; and  
8           if the number of transfer request entries available is greater than a first number;  
9 then

10          sending the transfer request as a posted request; else  
11          waiting to send the transfer request as a posted request.

1           2. The method of claim 1 wherein the transfer request is made by a video  
2 capture card.

1           3. The method of claim 1 wherein the transfer request is made by a graphics  
2 processor.

1           4. The method of claim 1 wherein the transfer request is sent over a  
2 HyperTransport bus.

1           5. The method of claim 1 wherein the number of pending posted requests is  
2 determined by an arbiter.

1           6. The method of claim 1 wherein the first number is programmable.

1           7. The method of claim 1 wherein the first number has a value of one.

1           8. A method of transferring data comprising:  
2           maintaining a first number of tokens;  
3           receiving a plurality of posted requests;  
4           if a remaining number of the first number of tokens is less than a first number,  
5 forwarding one of the plurality of posted requests as a non-posted request; else

6                   not forwarding the one of the plurality of posted requests as a non-posted request.

1                   9.       The method of claim 8 wherein the first number of tokens is one.

1                   10.      The method of claim 8 wherein the first number of tokens is maintained  
2 by an address decoder.

1                   11.     The method of claim 8 further comprising:  
2 receiving a response from a pending non-posted request; and  
3 incrementing the number of available tokens by one.

1                   12.     The method of claim 11 further comprising when the number of tokens is  
2 incremented above the first number, then forwarding the one of the plurality of posted requests  
3 as a non-posted request.

1                   13.     An integrated circuit comprising:  
2 an arbiter configured to track a number of available entries in a posted request  
3 FIFO;  
4 a plurality of clients coupled to the arbiter; and  
5 a HyperTransport bus coupled to the arbiter;  
6 wherein the arbiter receives peer-to-peer requests from the plurality of clients and  
7 provides posted requests to the posted request FIFO, and  
8 when the number of available entries in the posted request FIFO is equal to a first  
9 number, then preventing the plurality of clients from sending peer-to-peer requests.

1                   14.     The integrated circuit of claim 13 wherein the plurality of clients includes  
2 a graphics processor.

1                   15.     The integrated circuit of claim 14 wherein the plurality of clients further  
2 includes a PCI-to-PCI bridge.

1                   16.     The integrated circuit of claim 13 wherein the number of pending peer-to-  
2 peer requests is incremented by one for each granted posted request.

1           17. The integrated circuit of claim 16 wherein the number of pending peer-to-  
2 peer requests is decremented by one for each peer-to-peer request provided by a receive FIFO.

1           18. The integrated circuit of claim 13 further comprising when the number of  
2 pending peer-to-peer requests is less than the first number, allowing the number of clients to  
3 issue a peer-to-peer request.

1           19. The integrated circuit of claim 18 wherein the first number is one.